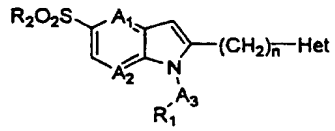
WHAT IS CLAIMED IS:

1. A compound according to formula (1):

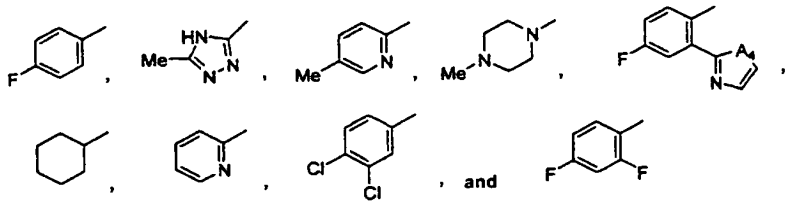


Wherein Het represents an optionally substituted heterocyclic group selected from the group consisting of oxetane, furan, dihydrofuran; tetrahydrofuran; pyran; dihydropyran; tetrahydropyran; dioxole; thiophene; dihydrothiophene; tetrahydrothiophene; thiopyran; dihydrothiopyran; tetrahydrothiopyran; pyrrole; dihydropyrrole; pyrrolidine; pyridine; dihydropyridine; tetrahydropyridine; piperidine; pyrazole; 2-pyrazoline; pyrazolidine; imidazole; imidazolidine; pyrimidine; pyrazine; oxazoline; piperazine; 1,2,3-triazole; 1, 2,4-triazole; tetrazole; isoxazole; 1,3-oxadiazole; 1,2,3-oxadiazole; 1, 2, 4-oxadiazole; 1,2,5-oxadiazole; 1,3,4-oxadiazole; 1,2-thiazole; 1,3-thiazole; 1,2,3-thiadiazole; 1,2,4-thiadiazole; 1,2,5-thiadiazole; 1,3,4-thiadiazole; 1,3-dioxolan, oxazolidine, and morpholine;

Wherein one of A1 and A2 represents -CH+ and the other of A1 and A2 presents -N-;

A3 represents -CH2-, -(C=O)-, or -SO2-;

R1 represents a group selected from the following formulae:



Wherein A4 represents -O-, -S-, or -NH-;

R2 represents a straight or branched alkyl group having 1 to 3 carbon atoms;

n is 0, 1, or 2;

Or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

2. the compound according to claim 1 wherein Het is an optionally substituted 5- or 6-membered, monocyclic aliphatic heterocyclic group or aromatic heterocyclic group and contains 1, 2, or 3 identical or different hetero atoms, selected from the group consisting of oxygen, nitrogen, and sulfur; or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

3. The compound according to claim 1 wherein Het is an optionally substituted 5-or 6-membered, monocyclic unsaturated aliphatic heterocyclic group or aromatic heterocyclic group, which heterocyclic group contains, identically or differently, 1, 2, or 3 oxygen or nitrogen atoms and optionally contains 1 sulfur atom;

Or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

4. The compound according to claim 3 wherein Het is an optionally substituted group selected from the group consisting of furan; 1,3-thiazole; 1,3-oxazole; 1,3,4-oxadiazole; pyridine; pyrimidine; and 5,6-dihydropyran; or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

5. The compound according to claim 1 wherein Het is substituted with a carboxyl group; or a nitrogen atom of the nitrogen atom-containing heterocyclic group of Het is N-oxide; or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

6. The compound according to claim 1 wherein n is 0 or 1; or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

7. The compound according to claim 1 wherein A1 is -CH= or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

8. The compound according to claim 1 wherein the group R1-A3- is a 4-fluorobenzyl group or addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

9. A compound selected from the group consisting of:

2-(2-furyl)-1-(4-fluorobenzyl)-5-methanesulfonyl-1H-pyrrolo[2,3-b]pyridine;

1-(4-fluorobenzyl)-2-(oxazol-2-yl)-5-methanesulfonyl-1H-pyrrolo [2,3-b]pyridine;

5-methanesulfonyl-2-(2-pyridyl)-1-(4-fluorobenzyl)-1H-pyrrolo[2,3-b]pyridine;

1-(4-fluorobenzyl)-5-methanesulfonyl-1-(2-pyrimidinyl)-1H-pyrrolo[2,3-b]pyridine;

2-(2-furanyl)-5-methanesulfonyl-1-(2-pyridylmethyl)-1H-pyrrolo[2,3-b]pyridine;

1-(4-fluorobenzyl)-5-methanesulfonyl-2-(5-methylfuran-2-yl)-1H-pyrrolo[2,3-b]pyridine;

2-(2-furanyl)-1-cyclohexylmethyl-5-methanesulfonyl-1H-pyrrolo[2,3-b]pyridine;

5-methanesulfonyl-2-(1-oxy-2-pyridyl)-1-(4-fluorobenzyl)-1H-pyrrolo[2,3-b]pyridine;

6-[1-(4-fluorobenzyl)-5-methanesulfonyl-1H-pyrrolo[2,3-b]pyridin-2-yl] nicotinic acid methylamide;

1-(4-fluorobenzyl)-5-methanesulfonyl-2-([1,3,4]oxadiazol-2-yl)-1H-pyrrolo[2,3-b]pyridine;

1-(4-fluorobenzyl)-5-methanesulfonyl-2-(5-fluoropyrimidin-4-yl)-1H-pyrrolo [2,3-b]pyridine;

1-(2,4-difluorobenzyl)-5-methanesulfonyl-2-[(1,3,4)oxadiazol-2-yl]-1H-pyrrolo[2,3-b]pyridine;

and addition salts thereof with a pharmaceutically acceptable acid or base, or hydrates thereof.

10. The compound according to claim 1 wherein R1 is phenyl, pyridine, or cyclohexyl and Het is furan, thiazole, oxazole, osadiazole, pyrimidine, pyran, or triazole.

11. A pharmaceutical composition containing as the active ingredient a compound according to claim 1 with a pharmaceutically acceptable ingredient.

12. A method for inhibiting cyclooxygenase-2 in a patient in need thereof comprising administering to said patient an effective amount of a compound according to claim 1.

13. A method for treating inflammation induced by cyclooxygenase-2 in a patient in need thereof comprising administering to said patient an effective amount of a compound according to claim 1.